

Social Analysis Systems²

Concepts and Tools for
Collaborative Research and Social Engagement

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Title	Towards a Management Plan for the Common Fishery Zone of Ancud, Chile
Key Words	<i>Option Domain</i> , Chile, Fisheries, Management Plan
Reference and Acknowledgement	Chevalier, J.M., Tapia C., Buckles, D. 2007. Towards a Management Plan for the Common Fishery Zone of Ancud, Chile. Social Analysis Systems ² 1.0 Technique Report #14, 7 pp. Retrieved from: http://idl-bnc.idrc.ca/dspace/handle/123456789/26782 .
Context	About 2000 artisanal fishers currently exploit shellfish in the Common Fishery Zone of Ancud in central coastal Chile. The kinds of species fishers seek include crabs and clams (<i>Venus antiqua</i> , <i>Gari solida</i> , <i>Ensis macha</i>). In 1991, the Chilean Fisheries and Aquaculture Act set up formal fishing zones known as AMERBs. The Act thus provided new ways to manage fisheries in the Bay of Ancud by giving organizations that represent artisanal fishers the right to request segments of seabed that were then to be managed jointly with the Undersecretary of Fisheries. The Act, however, offered no clear way to assign territorial use and rights that include historical claims to the fishery. As a result, two problems have emerged in the Zone of Ancud: 1) many fishers from other zones have entered the fishery, and 2) several well-informed and connected organizations have claimed parts of the zone, leaving out other local fishers and organizations. This conflict was resolved in June 2003, with the help of the Archbishop of Ancud and regional authorities. Even so, concerns about resource depletion and conflicts between fishers from outside and those living in the zone have continued.
Purpose	To assess and fully develop plans to set up territorial use rights and a better management of the Common Fishery Zone of Ancud.

Process Summary

The Fund for Fisheries Research, as part of the Undersecretary of Fisheries, held a one-day meeting of people from various artisanal fishers' organizations in the Zone of Ancud. Some 57 people attended. Most of them were male fishers and leaders of fishing organizations. A few women also took part. Five fisheries officials and scientists attended, along with several people from the Fund for Fisheries Research. Participants decided that the meeting would focus on the priorities and perspectives of the fisher representatives, and that the officials and scientists would act as their consultants throughout the meeting, as needed. Fishers then wrote on cards their ideas about how to improve territorial access and management of the fishery. They formed 13 piles from the same ideas and labelled each pile as a distinct line of action. They then rated the proposed actions on the basis of urgency, and chose the 7 most urgent for further discussion. Details of the selected actions were discussed and posted on flipcharts throughout the room.

The group was then asked to describe the factors (criteria) it would use to rate the proposed actions. Each proposed action was then rated and rating cards were placed on a grid on the floor, with participants forming a semicircle around the grid. During a break, the ratings were entered into the RepGrid software and displayed on a wall. This supported a discussion of the profiles of proposed actions, and allowed participants to identify problems they might encounter during implementation. The group then talked about ways to change the proposed actions to avoid these problems. The details of these suggestions were noted on the flipcharts where each proposed action was displayed. Information gaps (questions) that might require follow-up research and other problems not yet discussed were also listed. Two of the authors were involved in facilitation of the event. The participants understood that the results would be used to prepare reports, and agreed to share their information.

Analysis

The participants identified 13 ways to improve the way the fishery is managed. They rated them based on urgency, using a scale of 1 to 7 where 7 is very urgent (Table 1). Seven proposed actions received the highest score for urgency and were chosen by the group for further discussion and planning.

Table 1: Proposed actions for the management of the Common Fishery Zone of Ancud

Proposed Actions	Urgency (1 = low, 7 = high)
Restrict access	7
Form representative bodies	7
Create effective enforcement	7
Raise government funding	7
Mobilize support for implementation	7
Restock	7
Rotate fishing effort	7
Open access	6
Establish seasonal bans	6
Subdivide the fishery into separate zones	5
Train fishers and officials	5
Study markets	5
Support aquiculture	3

The following are details that participants offered for each possible action.

Restrict access

All fishers who are current members of the Ancud Commune should be allowed equal access to the fishery. This includes both registered and non-registered fishers. New fishers and fishers from outside the area should not be allowed to use the fishery.

Form representative bodies

A body should be set up to represent all fishers in the Ancud Commune, with an Administrative Council and equal voice for all members. A Technical Roundtable to bring together all stakeholders in the fishery (including scientists and government officials) should also be formed. The current Communal Fisheries Roundtable does not provide equal representation or voice and does not include all stakeholders.

Create effective enforcement

More effective enforcement is needed. The main government body that governs the fishery (SERNAPESCA) needs to show greater willingness to enforce rules and regulations and seek more operating resources. As well, fishers need to be involved in setting the rules and regulations for the fishery, speaking out against violations, and monitoring its use. Immediate measures must be taken to enforce minimum fish size restrictions, fishing bans, and a division of the fishery into sectors.

Raise government funding

Higher levels of government funding are needed if a fisheries management plan is to be set up. Needs include resources for administration, enforcement, training, restocking, etc. Core budget costs are the most difficult to finance. The task is a complex one due to financial rules set by the Chilean government's bureaucracy.

Mobilize support for implementation

Eight government bodies play a central role in managing the fishery: The Municipality of Ancud, the Undersecretary of Fisheries, the Fisheries Zone Council, the National Fisheries Service, the Port Authority (governed by the Chilean navy), the Provincial Government, the Prefect of the Xth Region, and the Regional Secretariat of the Ministry of the Economy. Gaining the good will and active support of all of these bodies is important. The Municipality of Ancud should play an active role in directing the management plan.

Restocking

Because some fishery stocks have declined due to overfishing, restocking is needed. Based on restocking experiences elsewhere in Chile, efforts should focus on a few of the most affected species. This includes pilot measures scaled to the capacity of the organizations to produce seed material for restocking.

Rotate fishing effort around the bay

Fishing should happen in many parts of the Bay. This would spread pressure on the fish stocks and allow them time to recover.

Participants then identified seven **criteria** that could be used to evaluate the proposed actions. The criteria included 1) the degree of conflict the proposed action is likely to generate when it is being implemented; 2)

how easy it will be to implement; 3) cost of the action; 4) the legal feasibility of the action; 5) whether the action can be completed in the short or long term; 6) to what extent the action depends on the fishers themselves; and 7) whether current efforts along the same lines are going well or badly. For each of these seven criteria, participants assigned a value of 1 to the positive side of the criteria and a value of 7 to the negative side of the criteria.

Table 2 presents the results of this rating exercise. Totals at the bottom show how proposed actions were rated compared to others. The lower the total is, the easier the proposed action. Forming representative bodies and mobilizing government support received the lowest ratings. Restocking and rotating of fishing effort were also ranked as clear and well-developed lines of action. Participants decided to focus on the remaining actions, namely those that they had given higher ratings and were more problematic.

Table 2: Ratings of proposed management actions for the Common Fishery Zone of Ancud

Criteria/Actions	Restrict access	Form representative bodies	Create effective enforcement	Raise government funding	Mobilize support for implementation	Restock	Rotate fishing effort
1 Conflict low 7 Conflict high	4	1	3	1	3	2	2
1 Easy 7 Hard	5	4	7	7	5	3	5
1 Less costly 2 More costly	2	5	7	2	1	5	6
1 More feasible legally 7 Less feasible legally	6	2	1	1	1	1	1
1 Short term 7 Longer term	5	2	6	4	4	5	4
1 Depends more on fishers 7 Depends less on fishers	5	3	5	7	1	2	2
1 Things going well 7 Things going badly	2	3	6	5	3	7	7
Totals	29	20	35	27	18	25	27

The overall pattern and features of more problematic actions are shown in Figures 1 and 2. Participants noted that restricting access to the fishery may not be costly but will take time, is less feasible legally, and will generate some conflict, at least at the beginning. Better enforcement measures, while more feasible legally, are not going well and represent a costly, longer-term approach that depends more on other actors. As for raising government funding, this is and will continue to be difficult and also depends on others. This assessment, discussed by participants as a group, led to a second discussion whose focus was on finding ways to adjust the lines of action in ways that could address their more problematic features.

Figure 1: Proposed management actions for the Common Fishery Zone of Ancud

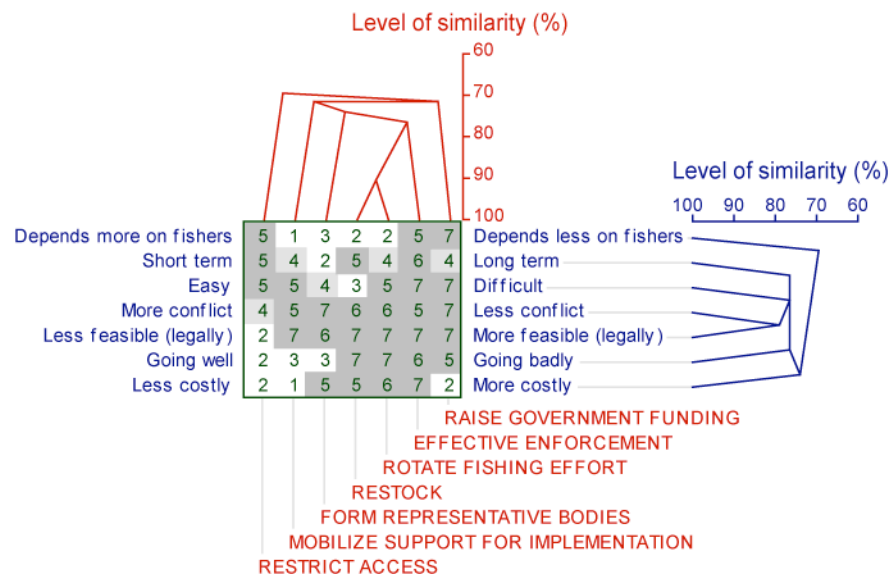
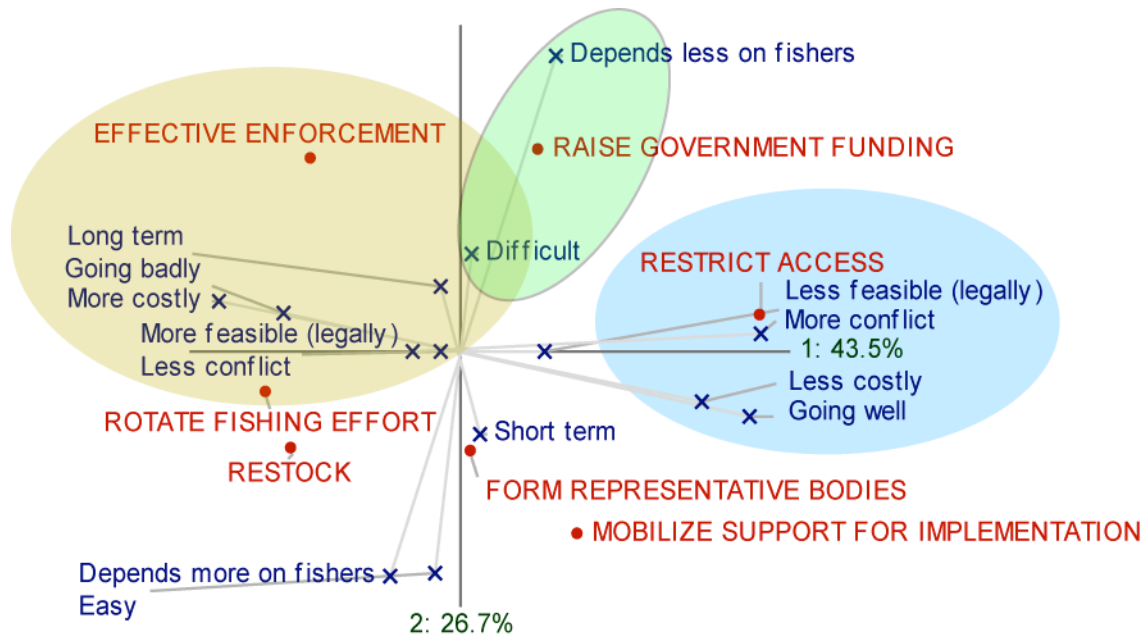


Figure 2: Proposed management actions for the Common Fishery Zone of Ancud



Interpretation

Participants looked very closely at why restricting access to the fishery might generate more conflict. They noted that some fishers are formally registered in fishing unions and organizations, while others are not. This could become the basis for a conflict between those included and those excluded from the fishery. Many of the unregistered fishers are older and less educated men with long-standing and legitimate claims to the fishery. The group talked about ways to register these fishers in organizations so that their right to access the fishery could be upheld and protected. Participants were aware but left unresolved the fact that some fishers would remain unregistered because they have criminal records; they would not be accepted into any organization.

Restricting access to the fishery would still be a problem because the Chilean legal system does not recognize a figure or body that can declare exclusive access to a fishery. Participants decided to seek administrative solutions that could be supported, over time, with the passage of new laws.

While fishers first saw raising government funds for the fishery as very difficult and beyond their control, talking with government officials and

scientists who know about funding sources revealed a funding source for some parts of the management plan. The prospect of raising funds from the private sector was also discussed and some sources were identified. Fishers could act directly through their organizations to pursue these sources.

Everyone agreed that better enforcement was a critical but very costly line of action. When the group talked about how to reduce costs, a possible enforcement role for the municipal government arose. The proposal involved the municipality raising funds through fines and the sale of seized fishing gear. They noted, too, that the municipality had already expressed its desire to assist, by offering the use of a boat to help with enforcement. To support this action, participants decided that training should be offered to municipal judges and lawyers (already paid by the town), so that they could provide better enforcement of fishing rules and regulations.

Action

In addition to outlining and evaluating proposed actions and ways to achieve them, participants identified several pending issues that need to be investigated further. This included gathering more information on the feasibility of restocking and whether status as a research-oriented fishery might be possible. It seemed that it might be easier to obtain this status than to obtain a declaration of exclusive access to a fishery, and still allow greater control over use of the fishery .

Observations on the Process

A first exercise that involved rating actions as either good or excellent was dropped because the scores did not vary. The remaining 7 rating criteria were considered by participants to be both relevant and sufficient for their purpose. Participants said they were very satisfied with the result and the level of participation of the different actors during the process. The contribution of officials acting as consultants was appreciated, without undermining the leadership by fishers directly involved in the situation. The level of agreement or consensus on the various actions identified was very high, an achievement participants said they had not thought was possible given the diversity of perspectives among stakeholders.